



PHIN Message Quality Framework (MQF) User Guide:

*Version 2.6
April, 2012*

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INSTRUCTIONS FOR USING THE SYSTEM

GETTING STARTED

1. In order to access the system, input the following URL: <https://phinmqf.cdc.gov/>.

Result: The following window displays. You have accessed the Home Page of the PHIN Message Quality Framework (MQF) application.

2. To continue, click one of the Message Domains.



MQF NAVIGATIONAL AIDS

The *left navigation panel* remains static as you use the system and provides you with References, Related Specifications, Related Websites, User Links, Downloads and Sample Messages.

The *right navigation panel* is dynamic and provides you with instructional information as you navigate through the system.

The *center portion of the page* is a dynamic work area and is the area where you interact with PHIN MQF. To access one of the links in blue type in the left column, click on that link.

These areas on the page are discussed in detail as you progress through the manual.

LEFT NAVIGATION PANEL

The *left navigation panel* remains static as you use the system and provides you with links to References, Related Specifications, Related Websites, User Links, and Downloads of profiles.

References
About MQF
Release Notes
Supported Specifications
Related Specifications
Case Notification
ELR
Immunization
PHLIP
Syndromic Surveillance
Related Websites
CDC Meaningful Use
ISDS Meaningful Use
PHIN Certification
PHIN MS

The **References** section on the *left navigation panel* provides you with information about the current release. The About MQF link opens another window and displays the current MQF release number as well as the date released. The Release Notes link opens a PDF file that outlines all enhancements and defects that have been fixed in the current release. The graphic below displays a sample Table of Contents for a Release Notes document

Table of Contents	
INTRODUCTION.....	4
Objective.....	4
System Overview.....	4
RELEASE 2.4 OVERVIEW	4
Release Scope	4
Message Validation Development Content.....	4
Enhancement/Defects.....	5
Configuration Notes.....	8

The final link is Supported Specifications. This link opens a PDF file, which outlines all published messaging standards that are supported in the current MQF release. The file further defines for each messaging standard what type of validation is performed: structural, constraint, and vocabulary validation. The following is a screen shot of the Supported Specification PDF.

SUPPORTED SPECIFICATIONS
<p>MQF supports HL7 validation for the following published message standards:</p> <p>Meaningful Use The American Recovery and Reinvestment Act authorizes the Centers for Medicare & Medicaid Services (CMS) to provide a reimbursement incentive for physician and hospital providers who are successful in becoming “meaningful users” of an Electronic Health Record (EHR). Starting in 2015, providers are expected to have adopted and be actively utilizing an EHR in compliance with the “meaningful use” definition or they will be subject to financial penalties under Medicare. In order to support Medicare and Medicaid Programs; Electronic Health Record Incentive Program; Final Rule for Meaningful Use, the MQF system has implemented message validation support. To meet this need, the following requirements have been included in PHIN MQF.</p> <p>Structural / Constraint / Vocabulary Validation is implemented for the following:</p>

The **Related Specifications** section on the *left navigation panel* provides links to the messaging standards used as a basis for the message validation within the MQF system. The Case Notification link opens the page detailing Case Notification Message Mapping Guide information.

PHIN Home Page

PHIN Home Page > [Resources](#) > [Guides](#)

Case Notification Message Mapping Guides

- Arboviral
- Tuberculosis
- Generic
- Generic Summary
- Varicella

This page provides case notification message mapping guides and other artifacts used for messaging HL7 v2.5 data to CDC.

To download a Message Mapping Guide (MMG) and other messaging artifacts, click on you would like to implement. Please reference the [2010 Event Codes and Reporting Mechanisms](#) document, which list the event codes for the nationally notifiable diseases and other conditions of public health importance for January 2010 with a notation for the reporting mechanism.

[Notifiable Disease Surveillance Quarterly Newsletter](#)

[PHIN Batch Specification V1.1](#)

Text size: S M L XL

[Email page](#)

[Print page](#)

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CDC 24/7
Saving Lives. Protecting People. Saving Money Through Prevention.
[LEARN MORE ABOUT HOW CDC WORKS FOR YOU.](#)

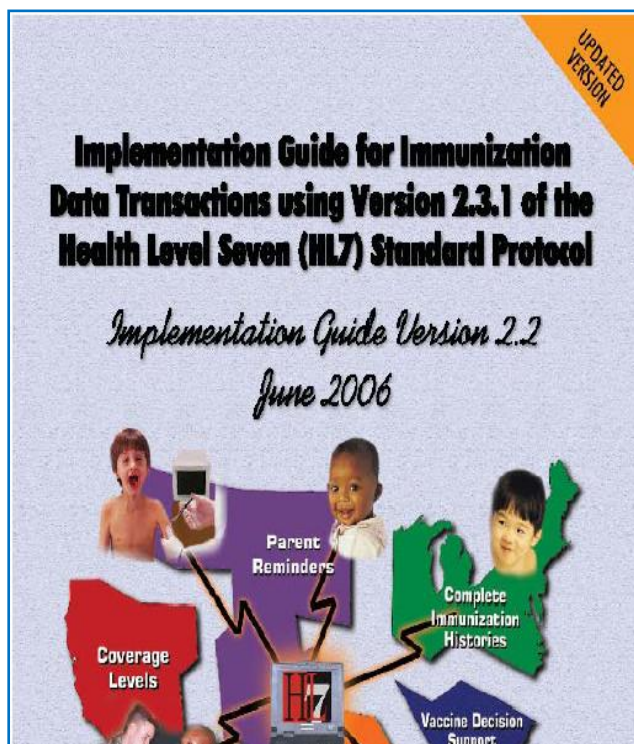
CDC 24/7 – Saving Lives. Protecting People. Saving Money Through Prevention. Learn More About How CDC Works For You...

Learn about the latest public health data.
[Read CDC Vital Signs™](#)

Contact Us:
Public Health Information Network (PHIN)
1600 Clifton Rd.

The ELR Specification link will open a window that provides information about the HL7 website where the ELR specification can be purchased and downloaded. MQF is not allowed to distribute the ELR implementation guide since the guide is copyrighted by Health Level Seven International and therefore requires an HL7 licensing agreement to purchase.

The Immunization Implementation Guide can be accessed by clicking the Immunization link. The following guide opens in PDF format.



When you click the PHLIP link, you are directed to APHL-CDC Public Health Laboratory Interoperability Project (PHLIP) Messaging Guide PDF. The purpose of this document is to specify the Health Level Seven (HL7) messaging guide, as supported by laboratory information systems, for the reporting of influenza test results.



**APHL-CDC Public Health Laboratory
Interoperability Project (PHLIP)**

**MESSAGING GUIDE FOR INFLUENZA
TEST RESULT REPORTING**

BY PUBLIC HEALTH LABORATORIES

ORU^R01

If you click the Syndromic Surveillance link, you are directed to the following page.

**PHIN MESSAGING GUIDE FOR SYNDROMIC
SURVEILLANCE: EMERGENCY
DEPARTMENT AND URGENT CARE DATA**

ADT MESSAGES A01, A03, A04, and A08

HL7 Version 2.5.1

(Version 2.3.1 Compatible)



Release 1.0

Related Websites

[CDC Meaningful Use](#)
[ISDS Meaningful Use](#)
[PHIN Certification](#)
[PHIN MS](#)
[PHIN VADS](#)

The **Related Websites** area of the *left navigation panel* provides links to additional websites that are resources for MQF: CDC Meaningful Use, ISDS Meaningful Use, PHIN Certification, PHIN MS, and PHIN VADS.

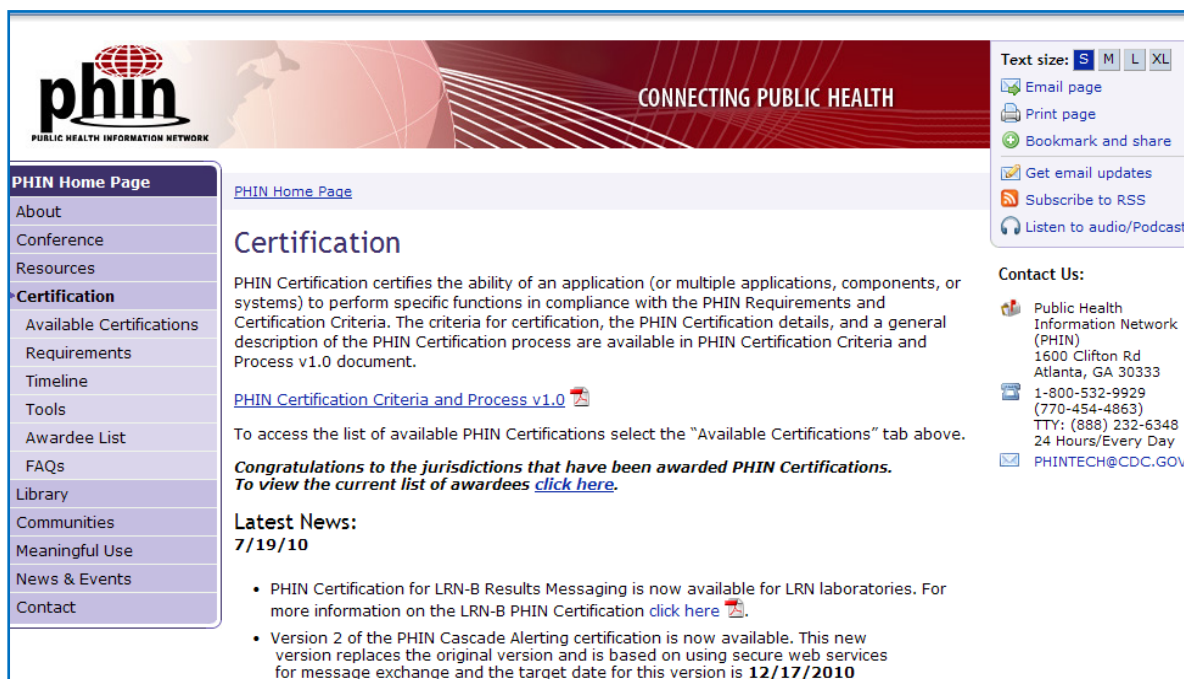
When you click the “CDC Meaningful Use” link, the CDC Meaningful Use website displays (see below) providing information on Meaningful Use topics.

In addition, this website provides external links, and provides answers to Frequently Asked Questions.

When you click the ISDS Meaningful Use link, the International Society for Disease Surveillance website displays providing Background, Development Process, and Support information regarding ISDS Meaningful Use.



When you click the PHIN Certification link from the *left navigation panel*, the Public Health Information Network (PHIN) website opens presenting PHIN Certification information. In addition, you can access the PHIN Certification Criteria and Process v.10 PDF, and the latest PHIN news that is available.



The screenshot shows the PHIN Certification page. The header features the PHIN logo and the tagline "CONNECTING PUBLIC HEALTH". A left navigation panel lists various sections, with "Certification" selected. The main content area includes a "Certification" section explaining the process, a link to the "PHIN Certification Criteria and Process v1.0" document, and a "Latest News" section dated 7/19/10. The right sidebar contains utility links like "Email page", "Print page", and "Bookmark and share", along with contact information for the Public Health Information Network (PHIN).

PHIN Home Page

- About
- Conference
- Resources
- Certification**
- Available Certifications
- Requirements
- Timeline
- Tools
- Awardee List
- FAQs
- Library
- Communities
- Meaningful Use
- News & Events
- Contact

[PHIN Home Page](#)

Certification

PHIN Certification certifies the ability of an application (or multiple applications, components, or systems) to perform specific functions in compliance with the PHIN Requirements and Certification Criteria. The criteria for certification, the PHIN Certification details, and a general description of the PHIN Certification process are available in PHIN Certification Criteria and Process v1.0 document.

[PHIN Certification Criteria and Process v1.0](#)

To access the list of available PHIN Certifications select the "Available Certifications" tab above.

Congratulations to the jurisdictions that have been awarded PHIN Certifications.
To view the current list of awardees [click here](#).

Latest News:
7/19/10

- PHIN Certification for LRN-B Results Messaging is now available for LRN laboratories. For more information on the LRN-B PHIN Certification [click here](#).
- Version 2 of the PHIN Cascade Alerting certification is now available. This new version replaces the original version and is based on using secure web services for message exchange and the target date for this version is **12/17/2010**

Contact Us:

Public Health Information Network (PHIN)
1600 Clifton Rd
Atlanta, GA 30333
1-800-532-9929
(770-454-4863)
TTY: (888) 232-6348
24 Hours/Every Day
PHINTECH@CDC.GOV

When you click the PHIN MS link from the *left navigation panel*, the Public Health Information Network (PHIN) website displays detailing information about the PHIN Messaging System. This website provides links to installation and support information.



The screenshot shows the PHIN Messaging System page. The header features the PHIN logo and the tagline "CONNECTING PUBLIC HEALTH". A left navigation panel lists various sections, with "Applications & Services" selected. The main content area includes a "PHIN Messaging System" section with links to "Installation", "Quick Steps", "FAQs", "Support", and "VeriSign Intermediate Certificate Information". It also features a "PHINMS User Group Meeting - November 18, 2010" announcement and a "PHINMS 2.8.01 SP1 for Windows Released" announcement. The right sidebar contains utility links like "Email page", "Print page", and "Bookmark and share", along with contact information for the Public Health Information Network (PHIN).

PHIN Home Page

- About
- Conference
- Resources
- Standards
- Applications & Services**
- CIT
- CRA
- EPI-X
- HAN
- LRN
- LUNA
- NEDSS
- PCA
- PHIN DIR

[PHIN Home Page](#) > [Resources](#) > [Applications & Services](#)

PHIN Messaging System

- Installation
- Quick Steps
- FAQs
- Support
- VeriSign Intermediate Certificate Information

PHINMS User Group Meeting - November 18, 2010
PHINMS will hold a PHINMS User's Group call on November 18, 2010, at 2pm EST.
Copies of User Group slides will be posted here on the day of the meeting.

PHINMS 2.8.01 SP1 for Windows Released
PHINMS 2.8.01 SP1 for Windows is now available for download. Contact the PHIN Helpdesk to obtain the software. PHINMS 2.8.01 SP1 build provides many improvements and bug fixes aimed at fixing known issues in 2.8.01. Some of the new features of this release include:

- Support for Windows Vista, Windows 7, and Windows 2008

Contact Us:

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1-800-532-9929
(770-454-4863)
TTY: (888) 232-6348
24 Hours/Every Day
PHINTECH@CDC.GOV

If you select PHIN VADS, the PHIN Vocabulary Access and Distribution System (VADS) website displays. This site allows you to Search Vocabulary, Download Vocabulary, and provides a compilation PHIN VADS Hot Topics.

The screenshot shows the PHIN Vocabulary Access and Distribution System (VADS) website. The header includes the site title and navigation links like 'Help' and 'Contact Us'. A search bar is located at the top left. The main content area features a navigation menu on the left with links such as 'Application Version: 3.3', 'Content Version: 2011.01.21', and 'Release Notes'. The central area displays a search bar with a magnifying glass icon and a 'Search All Vocabulary' button. Below this, there is a section titled 'PHIN VADS Hot Topics' which lists three items: 'ELR HL7 2.5.1 - Value sets associated with Electronic Laboratory Reporting HL7 2.5.1 Implementation Guide', 'Immunization HL7 2.5.1 - Value sets associated with Immunization HL7 2.5.1 implementation guide', and 'Syndromic Surveillance - Value sets associated with Syndromic Surveillance PHIN messaging guide'. Each item has a corresponding 'LINK' to its respective value sets or guide.

The **User Links** area of the *left navigation panel* provides further support documentation for MQF including MQF Frequently Asked Questions, a link to this MQF User Guide and a link to PHIN MQF Glossary. The Glossary defines terminology and acronyms that are used in the discussions of MQF.

User Links
FAQ
User Guide
MQF Glossary
Downloads
Profiles

An example of the Frequently Asked Questions PDF is displayed below.

PHIN MQF Frequently Asked Questions

- 1. What is PHIN MQF?**

The Message Quality Framework (MQF) is a flexible framework of services and utilities designed to assist public health partners with preparing and communicating quality, standard electronic messages as defined by the applicable messaging, vocabulary, and programmatic standards.

The PHIN Message Quality Framework (MQF) application is designed to accompany and to assist other CDC Public Health systems and partners in promoting the use of data and information system standards to advance the development of efficient, integrated, and interoperable surveillance systems at federal, state, and local levels.
- 2. What are the objectives including functionality of MQF?**

The PHIN Message Quality Framework (MQF) is a Web application, which enables users to load HL7 messages for structural, and message mapping Guide-constrained validation through the following methods:

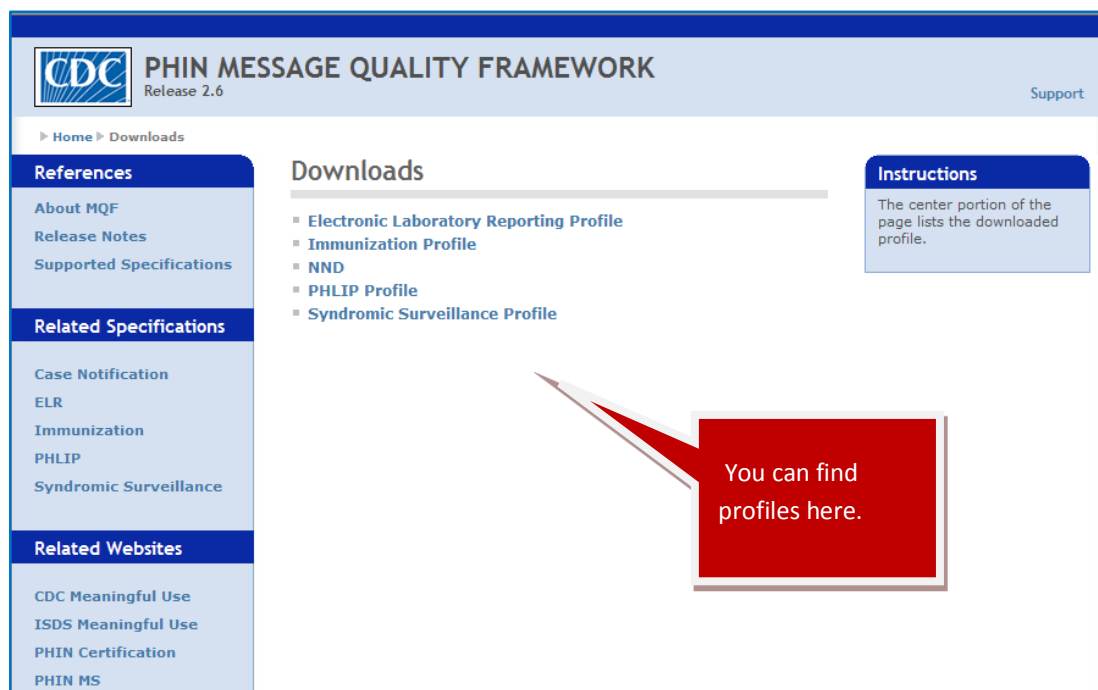
 - Sample (a pre-defined example message that is built into MQF)
 - Cut and Paste Message (a message you Cut and Paste into the Message Validation area)
 - File (a message that you browse for and load from your local system or network)

Once an HL7 message is loaded, a user may then edit the message in the MQF Validation Message Text

The **Download** area on the *left navigation panel* provides the capability to download the conformance profiles used within MQF for validation. A download provides Rhapsody s3d and XML formatted files that contain the structural and constraint validation for a selected domain (i.e., Case Notification, PHLIP, Immunization, etc).

The package that is downloaded also contains a Supplemental Specification document that provides the mapping, rules, and vocabulary that is validated for a selected message domain.

When you click *Profiles* under the Downloads section, the following window displays listing the available downloaded profiles.



RIGHT NAVIGATION PANEL

The *right navigation panel* is dynamic and provides you with instructional information as you navigate through the system. As you progress through the system, the system presents immediate instructions and dynamically changes with each window.

Instructions

You have accessed the Home page of MQF.

The left column remains static as you use the system and provides you with References, Related Links, and User Links, and Profile Downloads.

The right column is dynamic and provides you with instructional information as you navigate through the system.

The center portion of the page is the area where you interact with PHIN MQF.

To continue, click the desired domain listed under Message Domains.

DYNAMIC WORK AREA

The *center portion of the page* is the dynamic work area and is the area where you interact with PHIN MQF. In order to begin message validation, a message domain must be selected. To access one of the Message Domains in blue type, click on that link.

Breadcrumbs or a *breadcrumb trail* is a navigation tool that used for the user interface. Breadcrumbs provide a trail for the user to follow back to the starting or entry point.

Note the word, *Home*, in top-left corner of the window. *Home* is an example of a breadcrumb. As you progress through the program, the breadcrumbs provide a way to trace your location within the program.

CDC PHIN MESSAGE QUALITY FRAMEWORK
Release 2.6 Support

Home

References

- About MQF
- Release Notes
- Supported Specifications

Related Specifications

- Case Notification
- ELR
- Immunization
- PHLIP
- Syndromic Surveillance

Related Websites

- CDC Meaningful Use
- ISDS Meaningful Use
- PHIN Certification
- PHIN MS

Welcome to MQF

The Message Quality Framework (MQF) is a flexible framework of services and utilities designed to assist public health partners with preparing and communicating quality, standard electronic messages as defined by the applicable messaging, vocabulary, and programmatic standards.

Message Domains

- Case Notification
- Meaningful Use-Electronic Laboratory Reporting Receiver Profile
- Meaningful Use-Electronic Laboratory Reporting Sender Profile
- Meaningful Use-Immunization HL7 2.3.1
- Meaningful Use-Immunization HL7 2.5.1
- Meaningful Use-Syndromic Surveillance HL7 2.3.1
- Meaningful Use-Syndromic Surveillance HL7 2.5.1
- PHLIP

Instructions

You have accessed the Home page of MQF.

The left column remains static as you use the system and provides you with References, Related Links, and User Links, and Profile Downloads.

The right column is dynamic and provides you with instructional information as you navigate through the system.

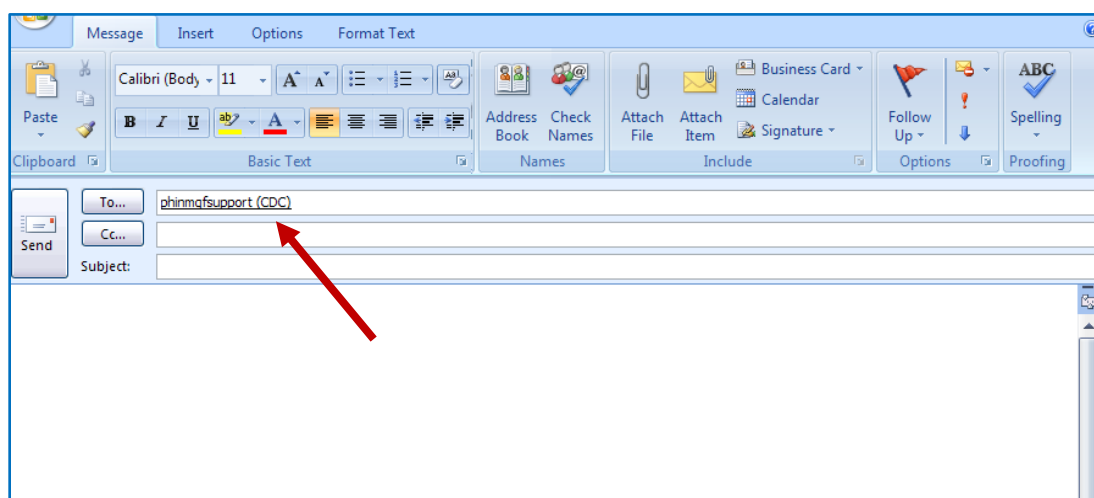
The center portion of the page is the area where you interact with PHIN MQF.

To continue, click the desired domain listed under Message Domains.

In top-right corner of the Landing Page, note the word *Support*.



When you click “Support,” an email opens in another window. See email sample below. As a user, if you have a problem using the system, a question about the system, or a suggested enhancement for the system, select this link.



Note the *Contact Us* link in the grey border at the bottom of the page. The *Contact Us* link has the same behavior as the “Support” link.”



The *Privacy Policy* is located in the grey border at the bottom of each page next to the *Contact Us* link. When you click “Privacy Policy,” the link directs you to the MQF Privacy Policy which explains what type of information the MQF system collects and stores.

STEPS TO CONTINUE THE VALIDATION PROCESS

In order to validate a sample message, you must complete the following five steps.

1. Load your message
2. If you selected a sample message, you must select the appropriate message specification.
3. Validate your output
4. Complete Structural Validation
5. Complete Vocabulary Validation, after you completed a successful structural validation.

LOADING A MESSAGE

You have arrived at this window because you selected a Message Domain from the Message Domain window. This screen will allow you to load a message into the system in order to validate the structure, business rules, and vocabulary for the message

Note: In the following instructions, the windows displays without a Selected Project name. The instructions depict a generic path through the system. The Selected Project will change depending on the Message Domain you select and will display accordingly.

A message can be loaded into the MQF system in one of the following ways:

- Sample (a pre-defined example message that is built into MQF)
- Cut and Paste Message (a message you Cut and Paste into the Validation Message area)
- File (a message that you browse for and load from your local system or network)

LOADING A SAMPLE MESSAGE

1. Select Sample from the drop-down menu.

The screenshot shows the 'Validate Messages' window. The 'Selected Project:' field is empty. The 'Load From:' dropdown menu is open, showing options: 'Make a Sel', 'Make a Seler', 'File', 'Sample', and 'Cut and Paste Message'. A red callout box with the text 'Select Sample.' points to the 'Sample' option. The 'Validation Message' text area is empty. At the bottom are 'Submit' and 'Reset' buttons. On the right, the 'Instructions' panel contains the following text:

Instructions

You have selected a Project.

To continue, load a message from one of the following:

- Sample (a pre-defined example message that is built into MQF)
- Cut and Paste Message (a message you Cut and Paste into the Message Validation area)
- File (a message that you browse for and load from your local system or network)

Note: Once MQF has validated the message structurally, continue with the **HL7 Implementation Process**.

Loading a Message Specification for a Sample Message

Note: This screen is displayed only if you have selected sample message.

Validate Messages

Selected Project:

Load From:

Message Specification:

Message:

Validation Message:

Instructions

You have selected to load a Sample message.

Next, you must select the specification from the Message Specification drop-down menu.

Note: At this time, MQF supports the use of both Carriage Return Line Feed characters (Hex 0D0A) and Carriage Return characters (Hex 0D) as segment delimiters. However, when the CDC receives messages only the use of the Carriage Return character (Hex 0D) specified in the specifications/guides as segment delimiter is supported.

1. To continue, you must select a specification from the Message Specification drop-down menu that lists the currently available Message Specifications for the project.

Note: For the purposes of detailing instructions in this manual, we will only select one Message Specification path and follow those instructions for loading a sample message. . Instructions for the remaining specification paths would follow the same process.

You have arrived at this window because you selected a Message Specification.

Validate Messages

Selected Project:

Load From:

Message Specification:

Message:

Validation Message:

Instructions

Next, you must load one of the Sample Types from the Message drop-down menu to validate.

Naming convention as seen below.

- Valid-Specification Name (message not containing errors)
- Invalid-Specification Name (message containing errors)

To continue, click Load.

2. Next, you must determine which of the following sample message you want to validate. There are three types of sample messages. Select a message from the drop-down menu.
 - Valid – a message that passed both structural and vocabulary validation without errors e.g., (Valid -TBV2.0Case Notification)
 - Invalid Structural – a message that did not pass structural validation and presents a structural validation error report e.g., (Invalid-TBV2.0 Case Notification)
 - Invalid Vocabulary – a message that passed structural validation, but did not pass vocabulary validation and presents a vocabulary validation error report e.g., (Invalid-Vocabulary- TBV2.0 Case Notification)
3. To continue, click “Load.”

[illegible]

- Note:** At this time, MQF supports the use of both Carriage Return Line Feed characters (Hex 0D0A) and Carriage Return characters (Hex 0D) as segment delimiters. However, when the CDC receives messages, only the use of the Carriage Return character (Hex 0D) specified in the specifications/guides as a segment delimiter is supported.
2. Note the Reset button. When you click “Reset,” you clear all drop-down menu selections.

You have arrived at this window because you selected a Message Domain from the Message Domain window.

2. You have selected to Cut and Paste a message to the Validation Message area. Copy and paste your message into the area.

[illegible]

3. You can edit or make any appropriate changes to the pasted message.
4. To continue, click "Submit."

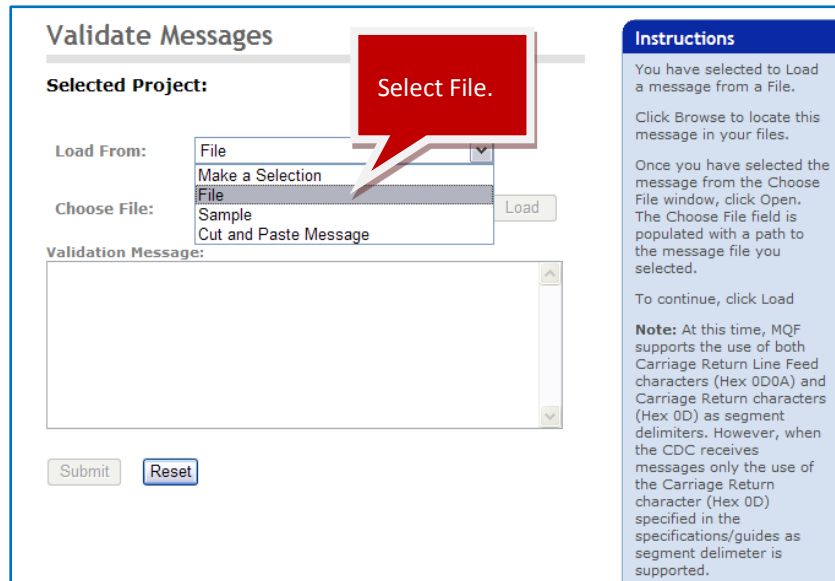
Note: At this time, MQF supports the use of both Carriage Return Line Feed characters (Hex 0D0A) and Carriage Return characters (Hex 0D) as segment delimiters. However, when the CDC receives messages, only the use of the Carriage Return character (Hex 0D) specified in the specifications/guides as a segment delimiter is supported.

5. Note the Reset button. When you click “Reset,” you clear all drop-down menu selections.

LOADING A MESSAGE FROM FILE

You have arrived at this window because you selected a Message Domain from the Message Domain window.

1. To load a message from File, select File from the drop-down menu.



The screenshot shows the 'Validate Messages' window. The 'Selected Project:' field is empty. The 'Load From:' dropdown menu is open, showing options: 'File', 'Make a Selection', 'File', 'Sample', and 'Cut and Paste Message'. A red callout bubble with the text 'Select File.' points to the first 'File' option. The 'Choose File:' field is empty, and the 'Load' button is visible. The 'Validation Message:' field is empty. At the bottom are 'Submit' and 'Reset' buttons. On the right, the 'Instructions' panel contains the following text:

Instructions

You have selected to Load a message from a File.

Click Browse to locate this message in your files.

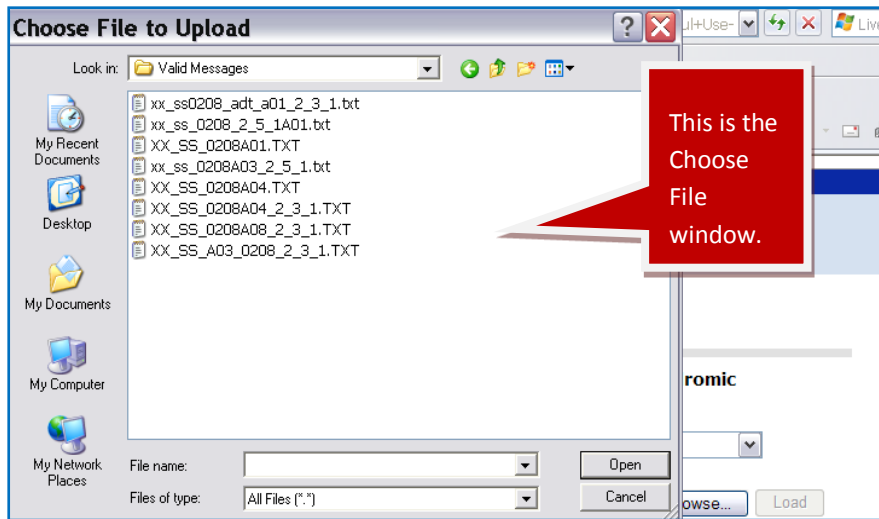
Once you have selected the message from the Choose File window, click Open. The Choose File field is populated with a path to the message file you selected.

To continue, click Load

Note: At this time, MQF supports the use of both Carriage Return Line Feed characters (Hex 0D0A) and Carriage Return characters (Hex 0D) as segment delimiters. However, when the CDC receives messages only the use of the Carriage Return character (Hex 0D) specified in the specifications/guides as segment delimiter is supported.

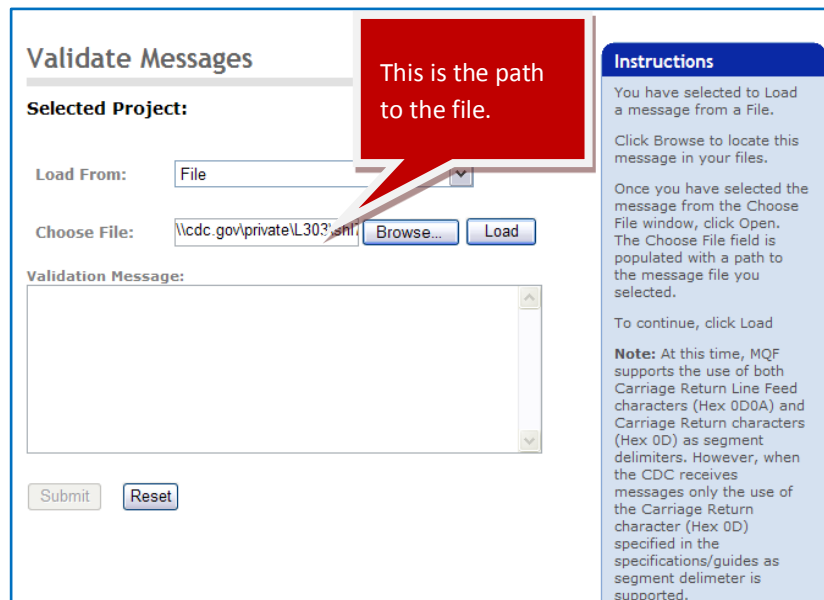
2. Browse to select a message from the Choose File window and then click "Open."

Result: The following window displays.



3. Select the file to upload.

Result: The *Choose File* field populates with a path to the message file you selected.



4. To continue, click "Load."

Result: The message you selected to load from file displays in the Validation Message text box. You can edit or make any appropriate changes to the message that displays.

Validate Messages

Selected Project:

Load From:

Choose File:

Validation Message:

```
MSH|^~\&||OTHER REG MED
CTR^1234567890^NPI|||201102171658||ADT^A03^ADT_A03
|201102171658076|P|2.3.1
EVN|A03|201102171658
PID|1||FL01059711^^^^PI||~^^^^^^U|||F||2106-
3^White^CDCREC|^^^FL^33821|||2186-
5^NotHispanic^CDCREC
PV1||I||E||||||7||||V20220217-
```

Instructions

Your message displays in the Validation Message Area. The message that displays can be edited. You make any appropriate changes. To continue, click Submit.

Message Display

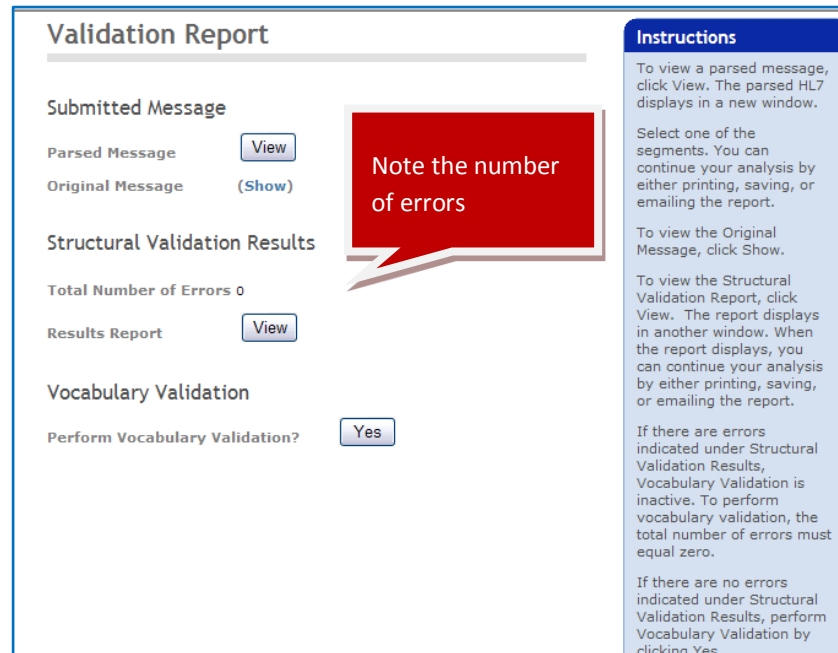
5. To continue, click "Submit."

Note: At this time, MQF supports the use of both Carriage Return Line Feed characters (Hex 0D0A) and Carriage Return characters (Hex 0D) as segment delimiters. However, when the CDC receives messages, only the use of the Carriage Return character (Hex 0D) specified in the specifications/guides as a segment delimiter is supported.

6. Note the Reset button. When you click "Reset," you clear all drop-down menu selections.

VALIDATING OUTPUT

This window displays after Structural and Message Constraint Validation for the message is complete. From this window, you can access the Submitted Message, view Structural Validation Results, and execute Vocabulary Validation.



Validation Report

Submitted Message

Parsed Message

Original Message [\(Show\)](#)

Structural Validation Results

Total Number of Errors 0

Results Report

Vocabulary Validation

Perform Vocabulary Validation?

Instructions

To view a parsed message, click View. The parsed HL7 displays in a new window.

Select one of the segments. You can continue your analysis by either printing, saving, or emailing the report.

To view the Original Message, click Show.

To view the Structural Validation Report, click View. The report displays in another window. When the report displays, you can continue your analysis by either printing, saving, or emailing the report.

If there are errors indicated under Structural Validation Results, Vocabulary Validation is inactive. To perform vocabulary validation, the total number of errors must equal zero.

If there are no errors indicated under Structural Validation Results, perform Vocabulary Validation by clicking Yes.

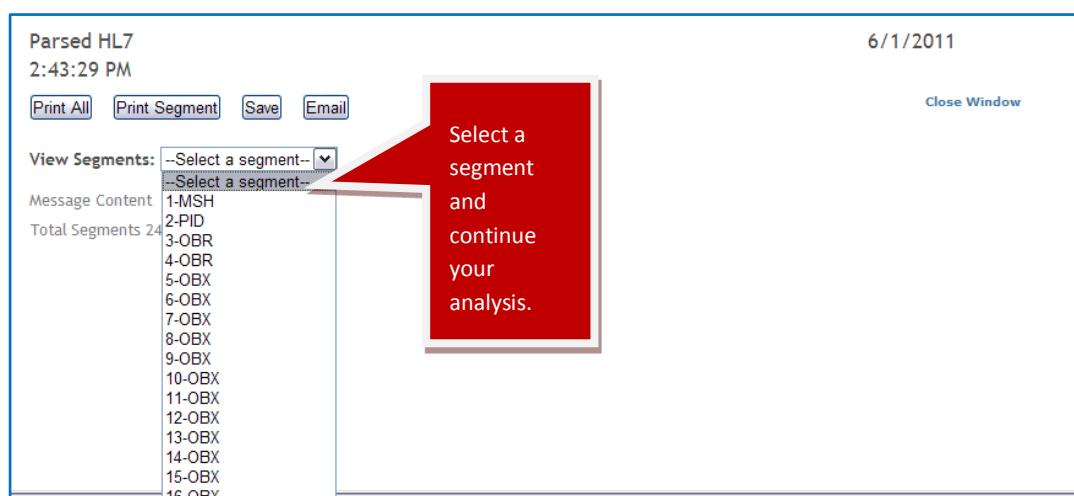
Note the number of errors

SUBMITTED MESSAGE

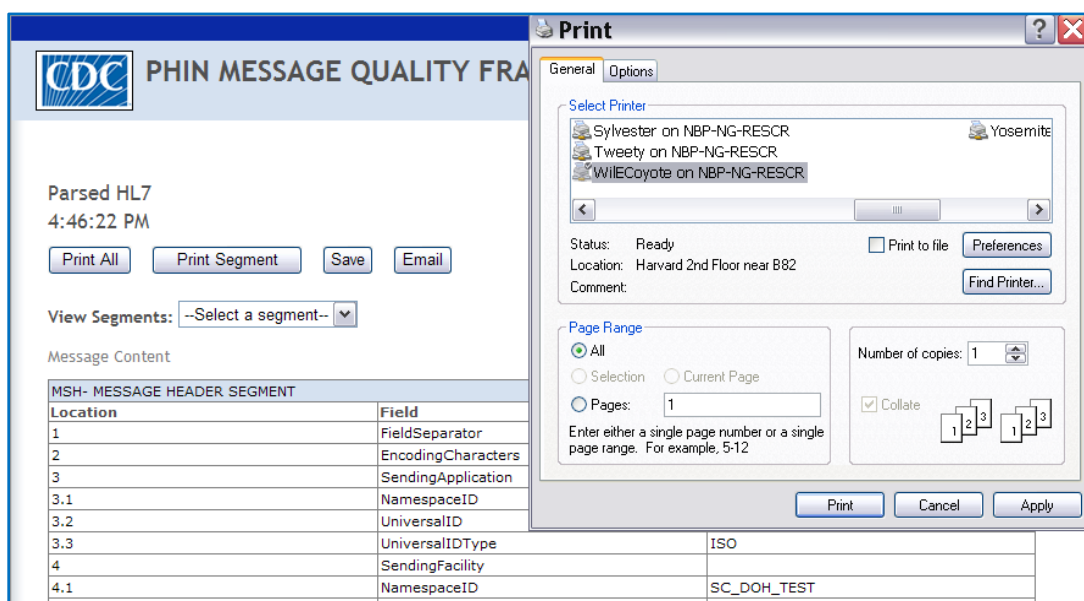
This window provides the capability to view, print, or email the submitted message.

1. To view the parsed message or segments of the message, click “View.”

Result: You arrived at this window because you clicked View below the submitted message section. The parsed HL7 message selected for validation displays in a new window.

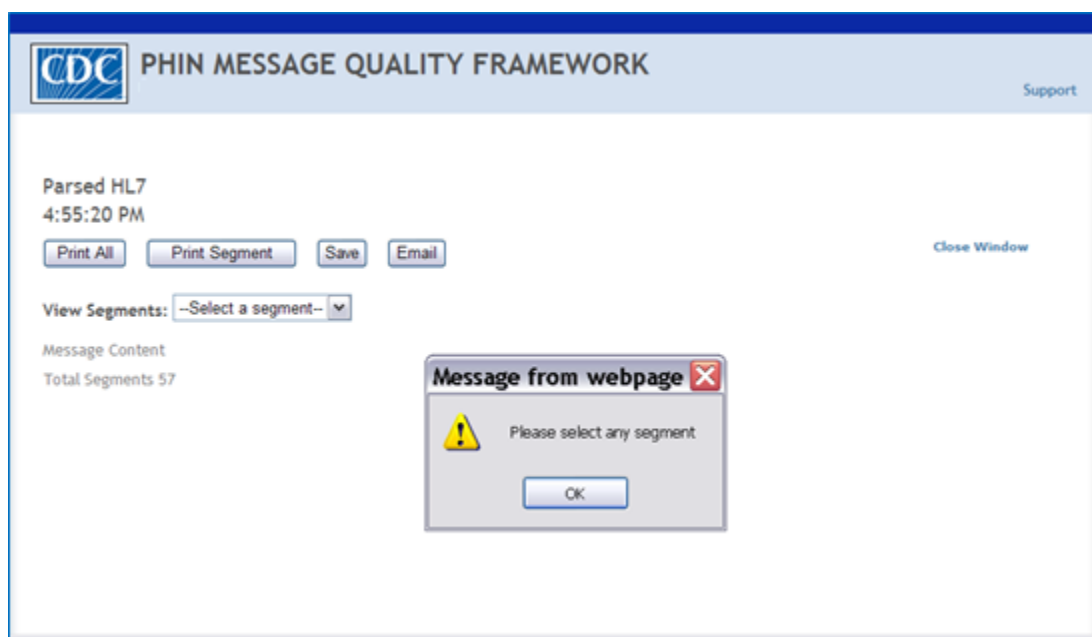


If you click the “Print All,” a new window is opened to allow selection of the printer. Once the printer and print button is selected, the entire message prints, even if a segment was selected.



To print a message segment select a message segment from the view segments drop-down list and click "Print Segment."

Note: If a message segment has not been selected, the following message will be displayed



2. Select one of the segments.

Result: The parsed segment displays in a report in another window.

Note: The 1MSH segment was selected. You can continue your analysis by either printing, saving, or emailing the entire report.

Parsed HL7
3:20:38 PM

6/1/2011

Print All Print Segment Save Email

View Segments: 1-MSH

Close Window

Description of the segment

Location	Field	Value
1	FieldSeparator	
2	EncodingCharacters	^~\&
3	SendingApplication	
3.1	NamespaceID	PHL_LIMS
3.2	UniversalID	2.16.840.1.114222.4.1.10412
3.3	UniversalIDType	ISO
4	SendingFacility	
4.1	NamespaceID	PHL
4.2	UniversalID	1234
4.3	UniversalIDType	CLIA
5	ReceivingApplication	
5.1	NamespaceID	PHA_ELR
5.2	UniversalID	2.16.840.1.113883.19.3.2
5.3	UniversalIDType	ISO
6	ReceivingFacility	
6.1	NamespaceID	PHA
6.2	UniversalID	2.16.840.1.113883.19.3.2
6.3	UniversalIDType	ISO
7	DateTimeOfMessage	
7.1	Time	

By clicking “Save,” the entire parsed message, not only the one selected, saves to a file on your local drive.

Parsed HL7**6/6/2011 4:51:11 PM****Message Content**

MSH- MESSAGE HEADER SEGMENT		
Location	Field	Value
1	FieldSeparator	
2	EncodingCharacters	^~\&
3	SendingApplication	
3.1	NamespaceID	NBS
3.2	UniversalID	2.16.840.1.114222.4.5.1
3.3	UniversalIDType	ISO
4	SendingFacility	
4.1	NamespaceID	SC_DOH_TEST
4.2	UniversalID	2.16.840.1.114222.4.1.3680
4.3	UniversalIDType	ISO
5	ReceivingApplication	
5.1	NamespaceID	PHINCDS
5.2	UniversalID	2.16.840.1.114222.4.3.2.10
5.3	UniversalIDType	ISO
6	ReceivingFacility	
6.1	NamespaceID	PHIN
6.2	UniversalID	2.16.840.1.114222
6.3	UniversalIDType	ISO

When you click “Email button,” the email window opens. This email window provides the capability to enter the receiver email address, type a message, and attach the entire parsed message.

Note: The entire parsed message will be sent in the email, not only the one selected segment.

The screenshot shows a web application window titled "PHIN MESSAGE QUALITY FRAMEWORK" with the CDC logo. The header includes a "Support" link. The main content area displays "Parsed HL7 (TB_ORU_R01_V2.0_HL7_2.5)" and the timestamp "4:36:49 PM" on the left, and "6/6/2011" on the right. Below this, there are four buttons: "Print All", "Print Segment", "Save", and "Email". A "Close Window" link is also present. The "Send Email" section contains a form with the following fields: "To:" (empty), "From:" (pre-filled with "phinmqfsupport@cdc.gov"), "Subject:" (pre-filled with "MQF Parsed HL7 Message"), and "Attachment:" (pre-filled with "ParsedHL7Output.Html"). There is a large text area for the "Message:" and two buttons at the bottom: "Send Email" and "Cancel".

STRUCTURAL VALIDATION RESULTS

1. Note the Structural Validation Results displayed on Validation Report window.
The total number of errors is zero (0).

Validation Report

Submitted Message

Parsed Message

Original Message [\(Show\)](#)

Structural Validation Results

Total Number of Errors 0

Results Report

Vocabulary Validation

Perform Vocabulary Validation?

Instructions

To view a parsed message, click View. The parsed HL7 displays in a new window.

Select one of the segments. You can continue your analysis by either printing, saving, or emailing the report.

To view the Original Message, click Show.

To view the Structural Validation Report, click View. The report displays in another window. When the report displays, you can continue your analysis by either printing, saving, or emailing the report.

If there are errors indicated under Structural Validation Results, Vocabulary Validation is inactive. To perform vocabulary validation, the total number of errors must equal zero.

2. To view the Structural Validation Report, click "View."

Result: This report displays in a new window.

The report displayed contains two types of error reporting: Structural Validation and Constraint Validation reporting. Once the report displays, you can continue your analysis by either printing, saving, or emailing the report. The print, save, and email functionality is the same functionality as the parse message screen print, save, and email capability. Refer to the parse message section for further detail.

The window below displays a sample Structural Validation Report when the message has passed structural validation.

The screenshot shows the 'PHIN MESSAGE QUALITY FRAMEWORK' interface. At the top left is the CDC logo. The title 'PHIN MESSAGE QUALITY FRAMEWORK' is in the top center, and 'Support' is in the top right. The main content area displays 'Structural Validation Report' and the timestamp '11:25:44 AM'. Below this are three buttons: 'Print', 'Save', and 'Email'. A red callout box with a speech bubble points to the message, containing the text: 'Note: The message did not generate errors.' To the right of the callout, the date '6/2/2011' and a 'Close Window' link are visible. Below the buttons, a message states: 'The submitted message did not generate any structural validation errors.' At the bottom, a footer contains the text: 'Privacy Policy | Copyright © 2011 CDC | All Rights Reserved | Contact Us'.

The window below displays a sample Structural Validation Report, which contains structural validation errors.

The screenshot shows the 'PHIN MESSAGE QUALITY FRAMEWORK' interface with a 'Structural Validation Report' dated '6/1/2011' at '3:14:57 PM'. It includes 'Print', 'Save', and 'Email' buttons, and a 'Close Window' link. Below the buttons, it states 'Total Number of Errors: 3'. A table lists the errors:

Seg #	Seg Seq #	Seg ID	Field Rep	Field #	Comp #	Error Type	Description
1	1	MSH	1	17	NA	Error	Required f
8	1	OBX	1	8	3	Error	The conditional predicate for this field/component failed validation
10	1	SPM	1	6	8	Error	The conditional predicate for this field/component failed validation

A red callout box with a speech bubble points to the 'Description' column, containing the text: 'Note the descriptions.'

The window below displays a sample Structural Validation Report, which contains no structural validation errors, but contains a Message Constraint Validation Report.

 **PHIN MESSAGE QUALITY FRAMEWORK** [Support](#)

Structural Validation Report
1:16:49 PM
[Print](#) [Save](#) [Email](#)

6/2/2011
**Message
Constraint
Validation Report**

The submitted message did not generate any structural validation errors.

Message Constraint Validation Report

Error Code	Error Description
SS 100	Required Data Element 'Age' data is missing in the message

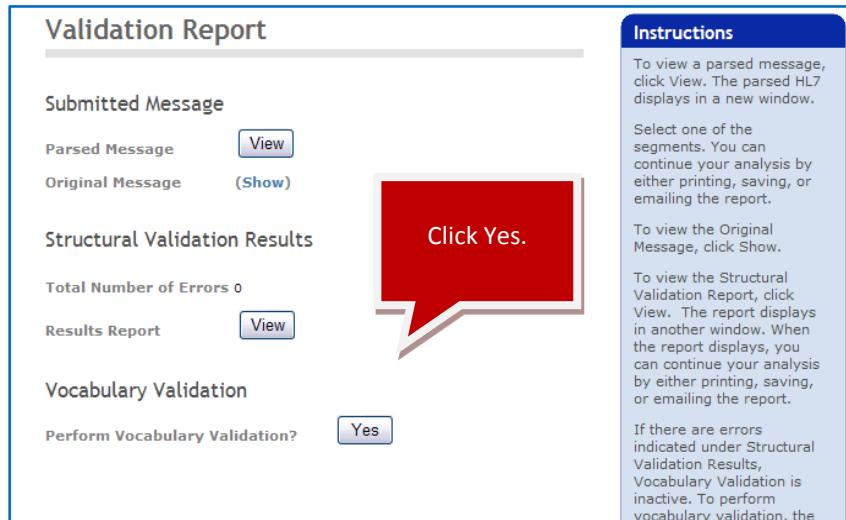
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VOCABULARY VALIDATION RESULTS

1. If there are **errors** indicated under Structural Validation Results, Vocabulary Validation is inactive. To perform vocabulary validation, the total number of errors must equal zero (0).

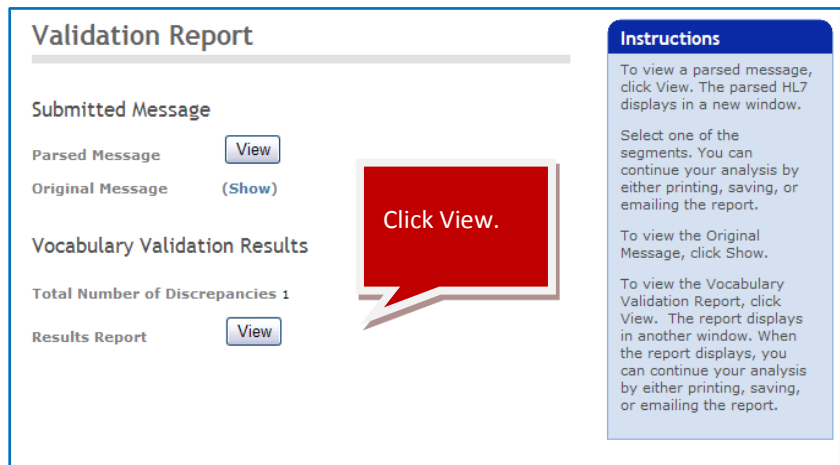
Note: “Perform Vocabulary Validation” is disabled, if the structural validation contains any errors.

2. If there are, **no errors** indicated under Structural Validation Results, click “Yes” to perform Vocabulary Validation.



The screenshot shows the 'Validation Report' window. On the left, under 'Submitted Message', there are links for 'Parsed Message' (with a 'View' button) and 'Original Message' (with a '(Show)' link). Below this, 'Structural Validation Results' shows 'Total Number of Errors 0' and a 'Results Report' link (with a 'View' button). At the bottom, 'Vocabulary Validation' has a 'Perform Vocabulary Validation?' label and a 'Yes' button. A red callout bubble points to the 'Yes' button with the text 'Click Yes.' On the right, an 'Instructions' panel provides guidance on viewing messages and reports.

Result: The following window displays.




This screenshot shows the 'Validation Report' window after clicking 'Yes'. The 'Vocabulary Validation Results' section now shows 'Total Number of Discrepancies 1'. The 'Results Report' link (with a 'View' button) is highlighted, and a red callout bubble points to it with the text 'Click View.' The 'Perform Vocabulary Validation?' button is no longer visible. The 'Instructions' panel on the right remains the same.

3. To view the Vocabulary Validation Results Report, click “View.”

Result: The report displays in a new window. When the report displays, you can continue your analysis by either printing, saving, or emailing the report.

The window below displays the Vocabulary Validation Report.

 **PHIN MESSAGE QUALITY FRAMEWORK** [Support](#)

Vocabulary Validation Report
2:06:52 PM
[Print](#) [Save](#) [Email](#)

One Vocabulary Validation Discrepancy

1/2/2011
[Close Window](#)

Total Vocabulary Validation Discrepancies: 1

Data Element	Data Value	Data Description (if available)	Coding System	Value Set Code	Description
QAK.2: Query Response Status	AA			PHVS_QueryResponse Status_IIS	Either the concept code value AA or the coding system for the data element QAK.2: Query Response Status is invalid per given valueset code

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